Upload Assignment: Assignment: Campaign Design

ASSIGNMENT INFORMATION

Points Possible
10

This assignment has two parts - in the first, you're attacking a system. In the second, you're defending.

Your target is a TP-Link NC200 cloud camera. It's in my office, in my house, and you don't like me very much because I just gave you this assignment. What kind of campaign are you going to execute to get back at me? Design the campaign architecture in detail.

Once the architecture is designed, what's the attack surface of the camera? Define the attack vectors of the attack surface. Which vectors are vulnerable? do any of them have available exploits? if so can you make any of those vectors available to you?

I'm not that concerned that you find or don't find an exploitable path. I want to see how you approach the problem, and what the results of your analysis are.

Now that you've defined how you're going to attack my camera, you've had a change of heart, because you find my lectures so entertaining. You've decided to help me defend my camera instead. What are your suggestions based on your attack surface analysis?

You'll submit a paper. I would like the paper in a very specific format - see the attached sample. The paper MUST be in PDF format, otherwise I won't grade it. I also expect the paper to be well written, and grammatically correct (no contractions, please).

Please use figures to illustrate your points! I expect at least two figures, and will deduct a point for each figure missing. If you don't follow the format I'm giving you, I'll give you a zero and you'll need to resubmit. Why am I being such a stickler about the report format? Well, it's vital that you be able to communicate effectively and professionally whether you stay in academia or move to industry. Remember, you get to submit your paper as many times as you'd like.

With correct grammar, formatting, and writing, I'll grade the report based on these criteria:

(20%) Is the campaign well thought out and does it address all the key aspects of a campaign design?

(50%) Is the attack surface well defined, researched, and explored?

(30%) Are the defensive suggestions sound?

sample-report.pdf